

IN THE CLAIMS

Amend Claims 1-14 as follows and add Claims 15-20:

1. (Currently amended) A method for attenuating the motion of hydraulic cylinders (10, 11) of mobile work machinery, in particular of hydraulic excavators, in which prior to reaching one of the limits of travel of the hydraulic cylinder (10, 11) its motion speed is reduced, and the hydraulic cylinder (10, 11) is moved to the respective limit of travel at reduced speed;

wherein for the purpose of reducing the speed, the inflow to, and/or the outflow from, the hydraulic cylinder (10, 11) are/is throttled by ~~means of~~ a flow control device (4, 5, 6), ~~characterized in that~~ and prior to the respective limit of travel being reached, the motion speed of the hydraulic cylinder (10, 11) is registered, and the point in time (P7, P7') when throttling commences is changed depending on the registered motion speed.

2. (Currently amended) The method according to ~~the previous claim 1~~, wherein the throttling speed of the flow control device (4, 5, 6) is preset irrespective of the registered motion speed of the hydraulic cylinder (10, 11).

3. (Currently amended) The method according to claim 1 ~~one of the preceding claims~~, wherein commencement of attenuation (P7, P7') is delayed with reduced registered motion speed.

4. (Currently amended) The method according to claim 1 ~~any one of the preceding claims~~, wherein a fixed initial point in time (P7) is always preset if the registered motion speed is greater than, or equal to, a preset limit speed, and ~~wherein~~, if the motion speed registered is below the limit speed, the point in time (P7') is delayed in relation to the fixed point in time (P7) by a period of time (t_f).

5. (Currently amended) The method according to ~~the preceding claim 4~~, wherein the period of time (t_f) is changed depending on the registered motion speed, preferably selected proportionally in relation to the registered motion speed.

6. (Currently amended) The method according to claim 1 ~~any one of the preceding claims~~, wherein prior to reaching the respective limits of travel, two limit signal transmitters (S_1 , S_2) which are arranged in tandem, are overtravelled; the period of time (t_k) between overtravel if the two limit signal transmitters (S_1 , S_2) is registered, from the registered period of time (t_k) and a preset period of time (t_s) a time difference (Δt) is determined; and according to the time difference (Δt), a delay (t_f) of the point in time (P7') when attenuation commences is determined.

7. (Currently amended) A device for attenuating the motion of hydraulic cylinders of mobile work machinery, in particular of hydraulic excavators, ~~according to the method according to any one of the preceding claims~~, comprising

a position registering device (17) for registering a preliminary limit position of the hydraulic cylinder (10, 11),

a control device (4, 5, 6) for throttling the inflow and/or outflow of the hydraulic cylinder (10, 11), and

a control device (15) for controlling the flow control device (4, 5, 6) when the preliminary limit position is reached, ~~characterised in that it comprises~~

a speed registering device (16) for registering the motion speed of the hydraulic cylinder when the preliminary limit position is reached, and ~~in that~~

the control device (15) comprises a delay device for delaying driving the flow control device (4, 5, 6), depending on the registered motion speed.

8. (Currently amended) The device according to ~~the preceding~~ claim 7, wherein the speed registering device (16) comprises two limit signal transmitters (S_1 , S_2) arranged in tandem, and a time registering device (19) is provided which registers the period of time (t_k) between the signals of the two limit signal transmitters (S_1 , S_2).

9. (Currently amended) The device according to ~~the preceding~~ claim 8, wherein one of the limit signal transmitters (S_1 , S_2) at the same time forms the position registering device (17).

10. (Currently amended) The device according to claim 7 ~~one of the preceding claims~~, wherein first and second markings (21, 22) are provided at the piston rod (18) of the hydraulic cylinder (10, 11) and/or at a detection transmitter (20) coupled therewith, with said first and second markings (21, 22) corresponding to the two preliminary limit positions, and ~~with~~ both markings being able to be registered by the position registering device (17) and/or the speed registering device (16).

11. (Currently amended) The device according to claim 7, ~~one of the preceding claims~~ wherein the speed registering device (16) is integrated in the hydraulic cylinder (10, 11).

12. (Currently amended) The device according to claim 7 ~~one of the preceding claims~~, wherein the speed registering device (16) is arranged ~~so as to be~~ separate from the hydraulic cylinder (10, 11) and is associated with a detection transmitter (20).

13. (Currently amended) The device according to claim 7 ~~one of the preceding claims~~, wherein the control device (15) comprises a comparator device (23) for comparing the registered period of time (t_k) with a preset period of time (t_s) and for forming the difference between the two periods of time (t_k , t_s), and wherein the delay device comprises a delay transmitter which presets the delay (t_F) at which the flow control device (4, 5, 6) is driven, with such presetting depending on the determined difference, preferably being proportional to said difference.

14. (Currently amended) The device according to claim 7 ~~one of the preceding claims~~, wherein the position registering device (17) is associated with a hinge point of two components of the motion train which is driven by the hydraulic cylinder (10, 11), with said position registering device (17) registering the position of the two components in relation to each other.

15. (New) The device according to claim 8, wherein first and second markings (21, 22) are provided at the piston rod (18) of the hydraulic cylinder (10, 11) and/or at a detection transmitter (20) coupled therewith, with said first and second markings (21, 22) corresponding to the two preliminary limit positions, and

both markings being able to be registered by the position registering device (17) and/or the speed registering device (16).

16. (New) The device according to claim 9, wherein first and second markings (21, 22) are provided at the piston rod (18) of the hydraulic cylinder (10, 11) and/or at a detection transmitter (20) coupled therewith, with said first and second markings (21, 22) corresponding to the two preliminary limit positions, and both markings being able to be registered by the position registering device (17) and/or the speed registering device (16).

17. (New) The device according to claim 8, wherein the control device (15) comprises a comparator device (23) for comparing the registered period of time (t_k) with a preset period of time (t_s) and for forming the difference between the two periods of time (t_k, t_s), and wherein the delay device comprises a delay transmitter which presets the delay (t_f) at which the flow control device (4, 5, 6) is driven, with such presetting depending on the determined difference, preferably being proportional to said difference.

18. (New) The device according to claim 9, wherein the control device (15) comprises a comparator device (23) for comparing the registered period of time (t_k) with a preset period of time (t_s) and for forming the difference between the two periods of time (t_k, t_s), and wherein the delay device comprises a delay transmitter which presets the delay (t_f) at which the flow control device (4, 5, 6) is driven, with such presetting depending on the determined difference, preferably being proportional to said difference.

19. (New) The device according to claim 10, wherein the control device (15) comprises a comparator device (23) for comparing the registered period of time (t_k) with a preset period of time (t_s) and for forming the difference between the two periods of time (t_k, t_s), and wherein the delay device comprises a delay transmitter which presets the delay (t_f) at which the flow control device (4, 5, 6) is driven, with such presetting depending on the determined difference, preferably being proportional to said difference.

20. (New) The device according to claim 15, wherein the control device (15) comprises a comparator device (23) for comparing the registered period of time (t_k) with a preset period of time (t_s) and for forming the difference between the two periods of time (t_k, t_s), and wherein the delay device comprises a delay transmitter which presets the delay (t_f) at which the flow control device (4, 5, 6) is driven, with such presetting depending on the determined difference, preferably being proportional to said difference.